

# DC67123 | Genevant CL1 monohydrochloride

## Instructions for Use

Genevant CL1 monohydrochloride, an ionizable lipid with a pKa of 6.3 (also referred to as lipid 10), serves as a key component in the formulation of lipid nanoparticles (LNPs) for the delivery of mRNA vaccines.

## Product information

|                    |                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAS No.            | Not available                                                                                                                                                       |
| Chemical Name      | Genevant CL1 monohydrochloride                                                                                                                                      |
| Formula            | C39H74ClNO2                                                                                                                                                         |
| M.Wt               | 624.46                                                                                                                                                              |
| Purity             | >98%                                                                                                                                                                |
| Storage            | Original product: up to 1 year under the storage conditions stated on the vial, kept tightly sealed. Stock solutions: aliquots at -20°C, generally up to one month. |
| Shipping condition | Ships from Shanghai. Pure lipid is stable during ice-pack transport.                                                                                                |

## Formulation & study context

Literature values apply to the cited study only. Administration routes describe research, not clinical instructions.

A complete product-specific formulation has not been verified. No standard ratio is substituted.

|                      |                                      |
|----------------------|--------------------------------------|
| N/P ratio            | Not reported in the verified record  |
| Cargo                | Not available in the verified record |
| Administration route | Not available in the verified record |
| Animal model         | Not available in the verified record |
| Formulation process  | Not available in the verified record |

N/P is a nitrogen-to-phosphate molar ratio. Lipid:cargo mass ratio is a different quantity and must not be used as N/P.

## Stock-solution preparation table

Calculated using product-page MW: 624.46 g/mol. Volumes are final solution volumes.

| Mass  | 1 mM      | 5 mM     | 10 mM    |
|-------|-----------|----------|----------|
| 10 mg | 16.014 mL | 3.203 mL | 1.601 mL |
| 25 mg | 40.035 mL | 8.007 mL | 4.003 mL |

| Mass   | 1 mM       | 5 mM      | 10 mM     |
|--------|------------|-----------|-----------|
| 50 mg  | 80.069 mL  | 16.014 mL | 8.007 mL  |
| 100 mg | 160.138 mL | 32.028 mL | 16.014 mL |
| 250 mg | 400.346 mL | 80.069 mL | 40.035 mL |

Volume (mL) = mass (mg) × 1000 / [MW (g/mol) × concentration (mM)]. Mathematical conversions only; not measured solubility. Confirm solvent compatibility and the exact material before preparation.

## Handling & storage

Provided that storage conditions are as stated on the product vial and the vial is kept tightly sealed, the product can be stored for up to 1 year.

Wherever possible, prepare and use solutions on the same day. If stock solutions must be prepared in advance, store them as aliquots in tightly sealed vials at -20°C. Generally, these will be usable for up to one month.

Before use, and prior to opening the vial, allow the product to equilibrate to room temperature for at least 1 hour.

## References

Not available